

Sub
A!

1 1. A digital television system comprising:
2 a first and second housing;
3 a receiver, adapted to receive a digital
4 television signal, in said first housing;
5 a digital television display in said second
6 housing; and
7 a digital graphics bus coupling said receiver in
8 said first housing and said display in said second housing.

1 2. The system of claim 1 wherein said first housing
2 is part of a modular platform adapted to receive
3 replaceable cards.

1 3. The system of claim 2 wherein each of said cards
2 is received in a plug, said plugs for said cards coupled by
3 a bus.

1 4. The system of claim 1 wherein said graphics bus
2 is coupled to an encryption and a decryption engine so that
3 traffic across said bus may be encrypted.

1 5. The system of claim 2 wherein one of said cards
2 is a motherboard including a processor.

1 6. The system of claim 5 wherein another of said
2 cards is a television tuner/capture card.

1 7. The system of claim 6 wherein one of said cards
2 is a digital video disk card.

1 8. The system of claim 2 including plugs in said
2 platform for both power and data.

1 9. The system of claim 8 wherein said plugs are
2 adapted to receive two different types of serial bus
3 interfaces.

1 10. The system of claim 2 wherein said platform
2 includes a processor and an infrared interface.

1 11. A digital graphics bus for coupling a digital
2 television receiver and a digital television display
3 comprising:
4 a encryption engine coupled to said bus for
5 encrypting signals transferred from said receiver to said
6 bus; and
7 a decryption engine coupled to said bus for
8 decrypting signals transferred from said bus to said
9 display.

1 12. The bus of claim 11 wherein said encryption
2 engine provides two different levels of encryption.

Self
A3

1 13. The bus of claim 12 wherein said bus periodically
2 encrypts at a higher level of encryption.

1 14. The bus of claim 13 wherein the level of
2 encryption is changed on frame boundaries.

1 15. The bus of claim 11 wherein said encryption and
2 decryption engines include linear feedback shift registers.

1 16. The bus of claim 15 wherein said shift registers
2 include programmable tap registers.

1 17. The bus of claim 16 wherein said programmable tap
2 registers are adapted to receive external tap selection
3 input signals.

1 18. The bus of claim 17 including a combiner adapted
2 to combine a seed signal together with feedback from said
3 programmable tap register to create an input signal to said
4 linear feedback shift register.

1 19. The bus of claim 18 wherein said tap register
2 includes combinatorial logic and tap memory.

1 20. The bus of claim 11 including a decryption and an
2 encryption engine on both ends of said bus.

1 21. The bus of claim 11 wherein said bus is adapted
2 to transfer streaming video at 100 megahertz or higher.

1 22. A modular platform for a digital television
2 system comprising:
3 a housing including a plurality of slots, each
4 slot including a plug adapted to removably receive a card;
5 a bus electrically coupling said slots to one
6 another; and
7 each of said plugs adapted to receive more than
8 one type of serial bus interface.

1 23. ~~The platform of claim 22 wherein one of said~~
2 ~~slots receives a motherboard with a processor.~~

1 24. The platform of claim 22 including a encryption
2 and decryption engine coupled to an external bus.

1 25. The platform of claim 24 wherein said encryption
2 engine is adapted to encrypt at two different levels of
3 encryption.

Sub
A6

26. The platform of claim 22 wherein said encryption levels are changed periodically.

1 27. The platform of claim 26 wherein said encryption
2 levels are changed on frame boundaries.

1 28. The platform of claim 22 wherein said plugs are
2 adapted to receive both data and power connections.

1 29. A method of implementing a digital television
2 system comprising:
3 providing a receiver in a first housing for
4 receiving a digital television signal;
5 providing a display in a second housing coupled
6 to said first housing;
7 transmitting encrypted video signals between said
8 housings; and
9 periodically changing the level of encryption of
10 said signals.

1 30. The method of claim 29 wherein changing the level
2 of encryption includes changing the level of encryption on
3 frame boundaries.